Amendments to the Specification:

Please amend numbered paragraph 0008, as shown below:

In a hybrid electric vehicle with engine start/stop capability [[the]] a battery controller may limit the maximum discharge power for various reasons. For example if the battery discharge limit becomes too low there may not be enough battery power available to start the engine. Also, when the vehicle is in reverse, the generator operates at a higher speed. Under such circumstances more battery power is required in order to start the engine.

Please amend numbered paragraph 0009, as shown below:

In accordance with the present invention a method and system of engine start/stop control for a HEV is provided that monitors the battery and requests a specific engine state based on the present state of the engine and a parameter of the battery. In one embodiment of the invention, the parameter is battery discharge power limit (DPL) and is computed in real-time as a function of battery state of charge (SOC), battery resistance, battery temperature, battery voltage, battery OCV, and battery life. Battery discharge power limit is the amount of power that can be used from the battery. Thus, if the battery discharge power limit is 10 kilowatts, the vehicle is allowed to use 10 kilowatts. In another embodiment, the parameter battery SOC is monitored as a proxy for battery discharge power limit on the assumption that battery discharge power limit will decrease with a decrease in battery SOC. In both embodiments the battery parameter is compared with a set of threshold levels including a MIN level, an ON level, and an OFF level and the result of the comparison provides inputs to a state machine. Preferably, different sets of threshold levels are provided depending upon whether the HEV transmission is in a forward drive ~~position~~ mode or a reverse ~~position~~ drive mode to account for the higher battery power needed to start the engine while in reverse.

Please amend numbered paragraph 0010, as shown below:

If the battery discharge power limit drops below a certain level it may be necessary to start the engine in order to charge the battery since otherwise it may not be possible to start the engine at all. However, under many circumstances it may be desirable to charge the battery[[, but]] when that is not so critical as in the above example. Under these circumstances it is desirable to wait and see if the engine is started for other reasons, such as driver demand being greater than can be supplied by the battery capability. If the engine is running it may be desirable to inhibit the shutting down of the engine so that the battery can be returned to a high SOC or high discharge power limit. This "wait and see" strategy or opportunistic mode of operation is incorporated in the present invention and has the effect of reducing engine cycling thereby increasing fuel economy while ensuring that the battery will always have enough energy to spin the engine to it's desired speed when the engine is not making positive torque (such as during start-stop).

Please amend numbered paragraph 0016, as shown below:

Referring now to the drawings and initially to Figure 1, a hybrid electric vehicle is generally depicted at 10 and includes a powertrain that may be any of the well known HEV configurations. One example is the PSHEV configuration shown and described in United States Patent Application S.N. 10/248,886 filed February 27, 2003, assigned to the assignee of the present invention and incorporated herein by reference. The powertrain includes a transmission 12 that is coupled to an internal combustion engine 14 and a high voltage battery 16 that act as power input sources. It will be understood that the source 14 is illustrated as an internal combustion engine but other sources such as a fuel cell system may be used as is known in the art. Likewise, the source 16 is illustrated as a battery but other sources such as an ultra capacitor may be used as is known in the art. A torque output shaft 18 of the transmission 12 is drivably connected to vehicle traction wheels 20 through a differential and axle mechanism 22. Of course, the present invention

is also applicable to four wheel drive systems in which all of the wheels [[22]] 20 are driven.

Please amend numbered paragraph 0019, as shown below:

The set of threshold levels shown in solid lines in Figure 3, represent calibratable values of DPL when the vehicle transmission is in drive position while the set of threshold levels shown in dotted lines represent such values when the vehicle transmission is in reverse ~~position~~ drive mode. The respective levels of the threshold values for reverse transmission ~~position~~ drive mode are greater than the corresponding values for drive transmission position to accommodate the higher DPL or SOC required in the reverse ~~position~~ drive mode. The three threshold levels are calibratable and their values depending upon the energy storage device being used and the vehicle configuration. For example, a 10 kWatt battery may need set points of 2, 4, 6 for the MIN, ON and OFF levels respectively whereas a 50 kWatt battery may need set points as 30, 35, 40. For battery SOC, the numbers would be in percentage terms. For battery DPL, the numbers would be in terms of power.